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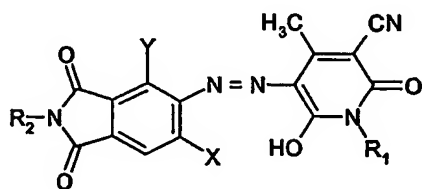
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For two-letter codes and other abbreviations, refer to the "Guid-
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ning of each regular issue of the PCT Gazette.

(54) Title: **PHthalimidylazo dyes, processes for the preparation thereof and the use thereof**



(I)

(57) Abstract: The present invention relates to dyes of formula (I) wherein R₁ is C₁-C₁₂alkyl or -C_nH_{2n}-(OCH₂CH₂)_m-OR₃, n being a number from 2 to 8, m being a number from 0 to 4 and R₃ being C₁-C₁₂alkyl, C₆-C₂₄aryl or C₆-C₂₄aralkyl, R₂ is methyl, ethyl, n-propyl, n-butyl, 2-methoxyethyl or 2-ethoxyethyl, X is halogen and Y is hydrogen, chlorine or bromine, and to the process for the preparation thereof and to the use thereof in dyeing or printing semi-synthetic and especially synthetic hydrophobic fibre materials, more especially textile materials.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09B29/036 C09B29/42 C09B67/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Section Ch, Week 197735 Derwent Publications Ltd., London, GB; Class A60, AN 1977-61950Y XP002260144 -& JP 52 085584 A (MITSUBISHI CHEM IND LTD) 15 July 1977 (1977-07-15) abstract; examples 1,2	1,2,4,5, 7,9,10
X	DATABASE WPI Section Ch, Week 197903 Derwent Publications Ltd., London, GB; Class A60, AN 1979-04691B XP002260145 -& JP 53 138431 A (MITSUBISHI CHEM IND LTD) 2 December 1978 (1978-12-02) abstract; compounds 6-1, 6-2, 6-3, 6-8 ----- -/--	1-3,5,7, 9,10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI Section Ch, Week 197847 Derwent Publications Ltd., London, GB; Class A60, AN 1978-84875A XP002260146 -& JP 53 119930 A (MITSUBISHI CHEM IND LTD) 19 October 1978 (1978-10-19) abstract; example 2; compounds 6-66</p>	1,2,4,5, 7,9,10
X	<p>DATABASE WPI Section Ch, Week 197903 Derwent Publications Ltd., London, GB; Class A60, AN 1979-04692B XP002260147 -& JP 53 138432 A (MITSUBISHI CHEM IND LTD) 2 December 1978 (1978-12-02) abstract; compounds 6-63</p>	1,2,4,5, 7,9,10
A	<p>GB 1 302 221 A (BADISCHE ANILIN- & SODA-FABRIK AG.) 4 January 1973 (1973-01-04) claims 1,11-15; example 51</p>	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 52085584	A	15-07-1977	JP 942851 C JP 53022194 B	15-03-1979 07-07-1978
JP 53138431	A	02-12-1978	NONE	
JP 53119930	A	19-10-1978	JP 1037892 C JP 55030747 B	24-03-1981 13-08-1980
JP 53138432	A	02-12-1978	NONE	
GB 1302221	A	04-01-1973	DE 1917278 A1 BE 748382 A1 BE 748383 A1 CH 508701 A CH 522711 A FR 2038227 A5 FR 2038228 A5 FR 2038229 A5 GB 1282384 A GB 1295893 A JP 48011204 B NL 7004736 A NL 7004737 A SE 366768 B US 3923776 A US 4133806 A	05-11-1970 02-10-1970 02-10-1970 15-06-1971 15-05-1972 08-01-1971 08-01-1971 08-01-1971 19-07-1972 08-11-1972 11-04-1973 06-10-1970 06-10-1970 06-05-1974 02-12-1975 09-01-1979